1.0 PURPOSE AND NEED

Section 1 presents the United States (U.S.) Department of Energy (DOE), National Nuclear Security Administration's (NNSA)[1] requirements under the National Environmental Policy Act of 1969 (NEPA), background information on the proposal, the purpose and need for agency action, and a summary of public involvement activities.

1.1 Introduction

NEPA requires Federal agency officials to consider the environmental consequences of their Proposed Actions before decisions are made. In complying with NEPA, the DOE, NNSA follows the Council on Environmental Quality regulations (40 Code of Federal Regulations [CFR] 1500–1508) and DOE's NEPA implementing procedures (10 CFR 1021). The purpose of an environmental assessment (EA) is to provide Federal decision makers with sufficient evidence and analysis to determine whether to prepare an environmental impact statement (EIS) or issue a Finding of No Significant Impact.

At this time, the NNSA must make a decision regarding the construction and operation of two segments of new roadways linking existing roadways and additional associated site access restriction actions for the purpose of improving physical security to certain portions of Los Alamos National Laboratory (LANL) and for the purpose of improving traffic safety within congested areas within the facility. LANL is a Federal facility located at Los Alamos, New Mexico (Figure 1), that comprises 43 square miles (mi^2) (111 square kilometers [km^2]) of buildings, structures and forested land. It is administered by DOE, NNSA for the Federal government and managed and operated under contract by the University of California (UC).

This EA has been prepared to assess the potential environmental consequences of the new road segments and site access restrictions compared to the No Action Alternative.

The objectives of this EA are to (1) describe the underlying purpose and need for DOE action; (2) describe the Proposed Action and identify and describe any reasonable alternatives that satisfy the purpose and need for agency action; (3) describe baseline environmental conditions at LANL; (4) analyze the potential indirect, direct, and cumulative effects to the existing environment from implementation of the Proposed Action, and (5) compare the effects of the Proposed Action with the No Action Alternative and other reasonable alternatives. For the purposes of compliance with NEPA, reasonable alternatives are identified as being those that meet DOE's purpose and need for action by virtue of timeliness, appropriate technology, and applicability to LANL. The EA process provides DOE with environmental information that can be used in developing mitigative actions, if necessary, to minimize or avoid adverse effects to the quality of the human environment and natural ecosystems should DOE decide to proceed with implementing the proposed construction and operation of these new road segments and other certain security features at LANL.

[1] The NNSA is a separately organized agency within the DOE established by the 1999 National Nuclear Security Administration Act [Title 32 of the Defense Authorization Act for Fiscal Year 2000 (Public Law 106-65)].

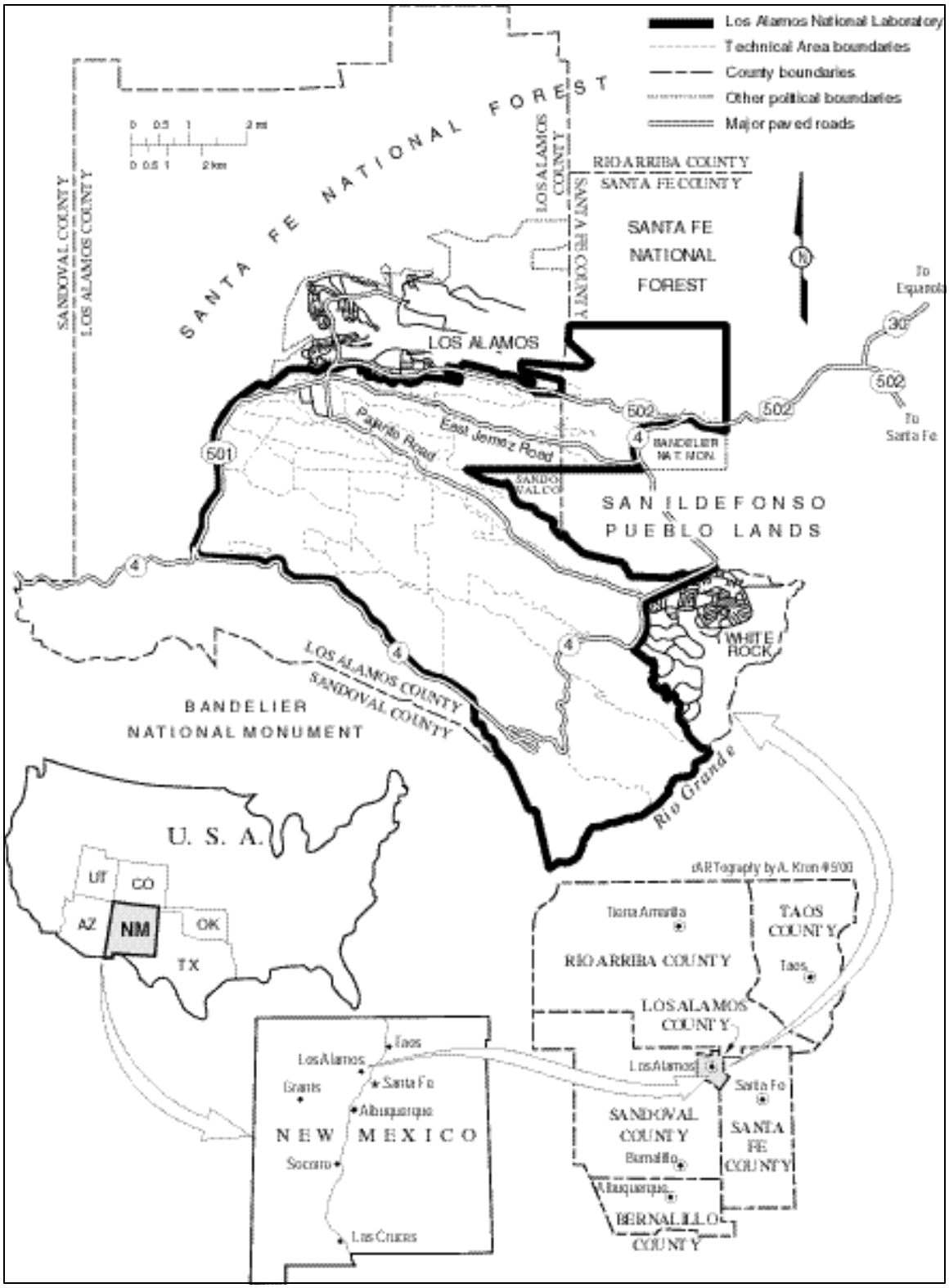

Figure 1. Location of Los Alamos National Laboratory.

Ultimately, the goal of NEPA, and this EA, is to aid DOE officials in making decisions based on an understanding of environmental consequences and taking actions that protect, restore, and enhance the environment.

1.2 Background

In the wake of the terrorist events of September 11, 2001, on properties within the U.S., the perceived nature and level of risk for terrorist attack to DOE, NNSA facilities changed. LANL is one of three national security laboratories that support DOE's responsibilities for national security, energy resources, environmental quality, and science. The DOE, NNSA's national security mission includes maintaining and enhancing the safety, reliability, and performance of the U.S. nuclear weapons stockpile; promoting international nuclear safety and nonproliferation; reducing global danger from weapons of mass destruction; and providing safe and reliable nuclear propulsion plants for the U.S. Navy. The energy resources mission of DOE includes research and development for energy efficiency, renewable energy, fossil energy, and nuclear energy. The environmental quality mission of DOE includes treatment, storage, and disposal of DOE wastes; cleanup of nuclear weapons sites; pollution prevention; storage and disposal of civilian radioactive waste; and development of technologies to reduce risks and reduce cleanup costs for DOE activities. DOE's science mission includes fundamental research in physics, materials science, chemistry, nuclear medicine, basic energy sciences, computational sciences, environmental sciences, and biological sciences, and often contributes to the other three DOE missions. LANL provides support to each of these departmental missions with a special focus on national security. These mission support activities conducted at LANL make it a very important facility to the Nation and one for which physical security must be maintained.

LANL is one of the few sites in the DOE complex where the general public has long enjoyed unrestricted vehicular access to core technical areas and where roads with public access pass within close proximity to Hazard Category 2 nuclear operations[2]. Temporary measures have been implemented since September 2001 to improve physical security within LANL. In January 2002, potential actions were identified to permanently address physical security concerns for LANL. NNSA determined that restricting public vehicular access to portions of LANL is an action that should receive high-priority consideration.

While the physical security environment of the Nation has changed and NNSA is considering making permanent changes to public vehicle access to various locations within LANL, it has long been recognized that the street and highway traffic patterns at some LANL locations have resulted in increased physical safety concerns. Over the past 15 years the population of LANL workers and visitors has grown. DOE, NNSA, and UC have been analyzing traffic flow problems and issues within LANL areas and have identified certain congested intersections and locations where safety issues exist. Various minor corrective actions have been implemented around LANL and other, more complex actions have come under contemplation. Now, with the enhanced physical security environment at LANL and within the Nation, making traffic flow changes for combined physical security and safety purposes is ripe for decision.

[2] Hazard Category 2 facilities are those for which a hazard analysis identifies the potential for significant onsite consequences in the event of certain accidents. There are no Hazard Category 1 hazards or operations at LANL that would have the potential for significant offsite consequences (this categorization of hazards is usually applied to nuclear reactors).

1.3 Statement of Purpose and Need for Agency Action

The DOE, NNSA has assigned a continuing role for LANL in carrying out its national security mission. To enable LANL to continue this enduring responsibility requires that NNSA maintain the capabilities and capacities required in support of its national mission assignments at LANL and adequately provide for their physical security. NNSA has identified the need to establish a permanent physical security framework to facilitate the implementation of security measures commensurate with daily DOE and NNSA imposed security conditions at LANL. It has also identified the need to change certain traffic flow patterns for the purpose of enhancing physical safety at LANL.

1.4 Scope of this EA

A sliding-scale approach (DOE 1993) is the basis for the analysis of potential environmental and socioeconomic effects in this EA. That is, certain aspects of the Proposed Action have a greater potential for creating environmental effects than others, therefore, they are discussed in greater detail in this EA than those aspects of the action that have little potential for effect. For example, implementation of the Proposed Action could affect transportation, ecological, waste management, and cultural resources in the LANL area. This EA, therefore, presents in-depth descriptive information on these resources to the fullest extent necessary for effects analysis. On the other hand, implementation of the Proposed Action would cause only a minor effect on socioeconomics at LANL. Thus, a minimal description of socioeconomic effects is presented.

When details about a Proposed Action are incomplete, as a few are for the Proposed Action evaluated in this EA (for example, the amounts of waste generated by demolition of certain buildings), a bounding analysis is often used to assess potential effects. When this approach is used, reasonable maximum assumptions are made regarding potential aspects of project activities (see Sections 2.0 and 4.0 of the EA). Such an analysis usually provides an overestimation of potential effects. In addition, any proposed future action(s) that exceeds the assumptions (the bounds of this effects analysis) would not be allowed until an additional NEPA review could be performed. A decision to proceed or not with the action(s) would then be made.

1.5 Public Involvement

DOE provided written notification of this NEPA review to the State of New Mexico, the four Accord Pueblos (San Ildefonso, Santa Clara, Jemez, and Cochiti), Acoma Pueblo, the Mescalero Apache Tribe, and to over 30 stakeholders in the area on March 22, 2002. DOE allowed for a 21-day comment period of the draft document. Where appropriate and to the extent practicable, concerns and comments were considered in the final EA. A public meeting at the Los Alamos Site Office was held on August 6, 2002, as part of this public involvement process.